

Swamp Darter

Etheostoma fusiforme

Guidelines for Landowners Using Conservation Practices

Missouri Department of
Conservation

Common name ▪ Swamp Darter
Scientific name ▪ *Etheostoma fusiforme*
State status ▪ Endangered
Federal status ▪ None

Ecology

Swamp darters are found in swamps, bayous and oxbow lakes along the eastern coast of the United States and as far north as Missouri along the Mississippi River. In Missouri, they are limited to locations in the southeastern corner of the state. Swamp darters prefer bodies of water that have no current and a substrate of mud and detritus, almost always in association with dense aquatic vegetation. Their diet consists of micro-crustaceans, midge and mosquito larvae and amphipods. Spawning likely occurs in late May among aquatic plants and is complete within a few days. Adults reach a maximum length of about 2.3 inches.

Reasons for Decline

The swamp darter probably was never common or widespread in Missouri. However, conversion of wetlands to agricultural fields and urban areas in its current range has decreased habitat for this fish resulting in a reduction in numbers and population fragmentation.

Recommendations

Swamp darters are very specific in their habitat requirements, which explain their limited range in Missouri. Because of this, alterations to existing habitat could eliminate this species from part of its natural, historical range. Protection and restoration of wetlands is an essential goal, not only for species like the swamp darter, but because wetlands provide important environmental services.



Photo Credit: Missouri Department of Conservation

Limit clearing of vegetation, including both standing and downed timber, to that which is absolutely necessary for construction purposes. Erosion and sediment controls should be strictly implemented, maintained, and monitored for the duration of the project.

If temporary in-channel fill is necessary, culverts of sufficient size should be employed to avoid water impoundment and allow for fish passage. Re-establish and maintain forested riparian corridors at least 100-feet wide along streams and wetlands or restore wetland habitat

Refer to Management Recommendations for Construction Projects Affecting Missouri Wetlands and Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers for additional guidelines.

Re-establish and maintain forested riparian corridors at least 100-feet wide along streams to reduce erosion and capture nutrient rich runoff. Discourage cattle from using streams and wetlands; exclude livestock from these sensitive areas with fences to allow the area to re-vegetate.

Consider the balance between adverse and beneficial practices when determining the overall effect of a conservation practice.

Beneficial Practices

- Limit livestock access to streams.
- Exclude livestock from wetlands.
- Nutrient and pest management on adjacent agricultural fields that results in reduced opportunities for contamination of runoff.

- Practices that control erosion and prevent the delivery of sediment to the aquatic system will prove beneficial to this species.
- Protection and restoration of riparian corridors along streams and wetlands.
- Wetland protection and restoration.

Adverse Practices

- Project activities occurring below the high water level between May 1 and June 15, the spawning period of this fish.
- Stream or oxbow crossings that interrupt natural flows.
- Draining or reducing known wetland habitat within the range of the swamp darter.
- Improper erosion and sediment control.
- Improper placement of culverts and fords used in ditch, stream, or oxbow crossings that create a barrier to fish passage or restrict stream flow.
- Unmanaged application of pesticides, animal waste or fertilizers.

Information Contacts

Missouri Department of Conservation
Policy Coordination Section
P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573-751-4115

<http://www.mdc.mo.gov/nathis/endangered/>

Missouri Department of Natural Resources
Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 800-361-4827 / 573-751-1300
<http://www.dnr.mo.gov/env/index.html>

U.S. Army Corps of Engineers
Regulatory Branch
700 Federal Building
601 E. 12th Street
Kansas City, MO 64106-2896
Telephone: 816-389-3990
<http://www.nwk.usace.army.mil/>

U.S. Environmental Protection Agency
Water, Wetlands, and Pesticides Division
901 North 5th Street
Kansas City, KS 66101
Telephone: 913-551-7003 / 800-223-0425
<http://www.epa.gov/region7/>

U.S. Fish and Wildlife Service
Ecological Services Field Office
101 Park DeVille Dr., Suite A
Columbia, MO 65203
Telephone: 573-234-2132
<http://www.fws.gov/midwest/partners/missouri.html>

Legal

The Missouri Department of Conservation prepared these guidelines for conservation practices with assistance from other state agencies, contractors, and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat.

Compliance with these management guidelines is not required by the Missouri wildlife and forestry law or by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.

“State Endangered Status” is determined by the Missouri Conservation Commission under constitutional authority, and specific requirements for impacts to such species are expressed in the Missouri Wildlife Code, rule 3 CSR 10-4.111.